## Remarks

Claim 24-46 are pending. Claims 24-46 are rejected. Claims 24-28, 30, 38,43,44 and 46 are currently amended. Support for the amendments can be found at, for example, paragraphs [0042], [0054] and [0055] as well as Figs. 3-5 of the originally filed application. Claim 39 is cancelled and the rejections with regard to this claim are now moot. The Applicants respectfully request entry of the amendments which are believed to place the claims in better condition for allowance or, alternatively, for appeal.

Claim 38 is rejected as anticipated under 35 USC §102(e) by US '475.

Amended Claim 38 is not anticipated under 35 USC §102(e) by US '475. Claim 38 now recites "an optical gate that comprises a local slave clock and that receives multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock[.]" US '475 fails to teach all the elements of amended Claim 38. US '475 does not disclose an optical gate that "receives multiplex non-return to zero type formatted signals and a cutting signal produced by a master clock" nor does it disclose an optical gate comprising "a local slave clock[.]" This means that US '475 fails to teach all the elements of amended Claim 38. Stated differently, this means that Claim 38 cannot be anticipated by US '475.

The Applicants respectfully request the withdrawal of the rejections made under 35 USC §102(e).

Claims 24 and 29-32 are rejected as obvious under 35 USC §103(a) over the combination of US '475 and US '259.

Amended Claims 24 and 29-32 are not obvious under 35 USC §103(a) over the combination of US '475 and US '259. As discussed above, US '475 fails to teach an optical gate that comprises a local slave clock and that receives multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock. Furthermore, US '475 fails to teach the step of "reformatting a non-return to zero type formatted, multiplexed signal to a return to zero type multiplexed signal with an optical gate comprising a slave local clock[.]" The citation of US '259 in the rejection does nothing to correct these deficiencies of US '475 as this step is not taught in US'590. This means that the combination of US '475 and US' 259 fails to teach all the elements of amended Claims 24 and 29-32. Stated differently, this means that amended Claims 24 and 29-32 cannot be obvious over the combination of US '475 and US '259.

Claims 25-28 are rejected as obvious under 35 USC §103(a) over the combination of US '475, US '259 and US '590.

Amended Claims 25-28 are not obvious under 35 USC §103(a) over the combination of US '475, US' 259 and US '590. As discussed above, the combination of US '475 and US '259 fails to teach the step of "reformatting a non-return to zero type formatted, multiplexed signal to a return to zero type multiplexed signal with an optical gate comprising a slave local clock[.]" The citation of US '590 does nothing to correct the deficiency of this core combination of references as this step is not taught in US '590. This means that the combination of US '475, US '259 and US '590 fails to teach all the elements of amended Claims 25-28. Stated differently, this means that amended Claims 25-28 cannot be obvious over the combination of US '475, US '259 and US '590.

Claims 33-37 and 43-44 are rejected as obvious under 35 USC §103(a) over the combination of US '475, US '259 and US '297.

Amended Claims 33-37 and 43-44 are not obvious under 35 USC §103(a) over the combination of US '475, US '259 and US '297. As discussed above, the core combination of US '475 and US '259 fails to teach an optical gate that "receives multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock[,]" an optical gate comprising "a local slave clock[,]" nor does this combination teach the step of "reformatting a non-return to zero type formatted, multiplexed signal to a return to zero type multiplexed signal with an optical gate comprising a slave local clock[.]" The citation of US '590 does nothing to correct these deficiencies of the core combination of US '475 and US '259. This is because US '590 fails to teach an optical gate element that receives "multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock" and which comprises "a local slave clock" nor does it teach the step of "reformatting a non-return to zero type formatted, multiplexed signal to a return to zero type multiplexed signal with an optical gate comprising a slave local clock[.]" This means that the combination of US '475, US '259 and US '297 fails to teach all the elements of amended Claims 33-37 and 43-44. Stated differently, this means that amended Claims 33-37 and 43-44 cannot be obvious over the combination of US '457, US '259 and US '297.

Claims 40-42 are rejected as obvious under 35 USC §103(a) over the combination of US '475 and US '297. As discussed above, neither US '475 nor US '297 teach "an optical gate that comprises a local slave clock and that receives multiplexed non-return to zero type formatted

signals and a cutting signal produced by a master clock[.]" This means that the combination of US '475 and US '297 fails to teach all the elements of amended Claims 40-42. Stated differently, this means that amended Claims 40-42 cannot be obvious over the combination of US '475 and US '297.

Claim 45 is rejected as obvious under 35 USC §103(a) over the combination of US '475 and US '616.

Amended Claim 45 is not obvious under 35 USC §103(a) over the combination of US '475 and US '616. As discussed above, US '475 fails to teach "an optical gate that comprises a local slave clock and that receives multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock[.]" The citation of US '616 does nothing to cure this deficiency of US '475. This is because "an optical gate that comprises a local slave clock and that receives multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock" is not taught in US '616. This means that the combination of US '475 and US '616 fails to teach all the elements of amended Claims 1-21. Stated differently, this means that amended Claim 45 cannot be obvious over the combination of US '475 and US '616.

Claim 46 is rejected as obvious under 35 USC §103(a) over the combination of US '475 and US '297. As discussed above, US '475 fails to teach "an optical gate that comprises a local slave clock receives multiplexed non-return to zero type formatted signals and a cutting signal produced by a master clock and a master clock controlling the slave clocks[.]" The citation of US '297 does nothing to cure this deficiency as this element is also not taught in US '297. This means that the combination of US '475 and US '297 fails to teach all the elements of amended Claim 46. Stated differently, this means that amended Claim 46 cannot be obvious over the combination of US '475 and US '297.

The Applicants respectfully request the withdrawal the rejections made under 35 USC §103(a).

Respectfully submitted,

T. Daniel Christenbury Reg. No. 31,750

Attorney for Applicants

TDC/vbm (215) 656-3381